

III. Remarks

A. Amendments to the Claims

Claim 1 has been amended to add the phrase "over the entire circumference of the tablet" at the end of the claim. Support for the addition to claim 1 of the term "over the entire circumference of the tablet" is provided by the Specification at page 55, lines 12-29 and in particular, at page 56, lines 4-8. Page 56, lines 4-8, read as follows:

The configuration of the above-described three-layer tablet is particularly visually attractive when the viscoelastic layer constitutes 0.1 to 0.6 times, preferably 0.15 to 0.5 times and in particular 0.2 to 0.4 times, the total height of the tablets.

B. Joint Inventors

In reply to the inquiry in the Action at page 2, lines 20-26, the subject matter of Applicants' invention was commonly owned at the time the invention was made.

C. Rejection Under 35 U.S.C. Section 103

Claims 1-25 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over United States Patent No. 6,548,473 to Thoen et al.

1. Position of the Examiner

The Examiner's reasons in support of the finding of *prima facie* obviousness of claims 1-25 are set forth in the Action at page 3, line 5 to page 4, line 8 and page 4, which reads as follows:

Jacques Kaniel Thoen et al. disclose a multi-layer detergent tablet having both a compressed and non-compressed portion comprising, in the non-compressed portion of said multi-layered tablet, at least 0.01% of a surfactant (col. 14, lines 54-61) and in particular anionic surfactants such as linear alkyl benzene sulfonate (col. 21, lines 32-42). Jacques Kaniel Thoen et al. further disclose the inclusion of builders in an amount from 10-80% by weight (col. 27, lines 41-50) and the at least one non-compressed portion of the detergent tablet is equal to or less than the compressed mold portion of the tablet (col. 51, lines 11-25). Jacques Kaniel Thoen

further teaches that the viscosity of an ingredient in the non-compressed phase, which comprises surfactants, gallants, builders and other adjunct material, is 50 to 100,000 cps (column 12, lines 60-63).

Jacques Kaniel Thoen et al. do not specifically teach that said phase is a viscoelastic phase having storage modulus of between 40,000 and 800,000 Pa and a phase shift in the range of 0 to 30 degrees Celsius.

It would have been obvious to one of ordinary skill in the art to expect the compositions of Jacques Kaniel Thoen et al. to comprise a storage modulus or phase shift as claimed in the non-compressed layer because Jacques Kaniel Thoen et al. teaches the use of alkyl benzene sulfonates as surfactants that may be used in the non-compressed phase of the tablet composition and the skilled artisan would expect similar properties, in the absence [of] a showing to the contrary. Furthermore, the court held "it is not necessary in order to establish a *prima facie* case of obviousness... that there be a suggestion or expectation from the prior art that the claimed [invention] will have the same or a similar utility as one newly discovered by applicant," and concluded that here a *prima facie* case was established because "[t]he art provided the motivation to make the claimed compositions in the expectation that they would have similar properties." *In re Dillon*, 919 F.2d 693, 16 USPQ2d 1901 (Fed. Cir. 1990).

At page 4, line 14 to page 5, line 21 of the Action in the "Response to Arguments," the Examiner set forth the following additional reasons in support of the rejection.

The examiner contends and respectfully disagrees because Thoen et al. specifically teach that said detergent composition is in the form of a multilayered tablet (column 14). Thoen et al. specifically discloses that said tablet is prepared by having a compressed portion in a plurality of molds. The plurality of molds is filled with a non-compressed, non-encapsulating portion (col. 52, lines 47-54) using a modified tablet press comprising modified upper and lower punches. The upper and lower punches of the modified tablet press are modified such that the compressed portion provides one or more indentations, which form the molds to which the non-compressed portion is delivered (col. 51, lines 54-55). Therefore, it can be seen that Thoen et al. teaches that said multi-layered tablet is formed with at least three layers and said layers comprise compressed layers and a non-compressed [layer]. Accordingly, the claims are suggested by the prior art of record.

Applicant further argues that Thoen [et al.] do not suggest a viscoelastic phase tablet.

The examiner contends that the term "viscoelastic," according to applicant's specification, is a phrase that exhibits both viscous and elastic behavior (see page 3,

lines 31–33). Therefore, as applicants' working examples employ a plethora of ingredients that constitute the "viscoelastic phase," Thoen [et al.] clearly suggest [that] many of these ingredients, when combined, would clearly read on a viscoelastic phase as broadly defined by the claims and suggested by the specification.

Applicant further argues that Thoen [et al.] does not suggest tableted layers in contact with a viscoelastic phase.

The examiner contends that Thoen [et al.] clearly suggests multi-layer tablets and clearly suggests a non-compressed phase which reads on applicants' viscoelastic phase, in the absence of a showing to the contrary, wherein it would have been in the purview of the artisan of ordinary skill in the art to expect the non-compressed phase and the compressed layers are in contact with one another.

*An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not. See KSR Int'l Co. v. Teleflex Inc., 550 U.S. __, 2007 WL 1237837, at *12 (2007).*

2. Legal standard for a rejection under 35 U.S.C. Section 103

The legal interpretation of Section 103 to be applied is set forth in the recent Supreme Court decision of *KSR International Co. v. Teleflex Inc.* (*KSR*), 550 U.S. __, 82 USPQ2d 1385 (2007). *KSR* cites *Graham v. John Deere Co. of Kansas City*, (383 U.S. 1, 17–18 [148 USPQ 459] (1966)) as setting out an objective analysis for applying Section 103. (82 USPQ 2d at 1388). The objective analysis is as follows:

Under § 103, the scope and content of the prior art are to be determined; the differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.

(148 USPQ at 467).

Accordingly, the factual inquiries set forth by the Court are as follows:

- (a) [T]he scope and content of the prior art are . . . determined;
- (b) Differences between the prior art and the claims at issue are . . . ascertained;
- (c) The level of ordinary skill in the pertinent art [is] resolved; and
- (d) Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized. . . .

3. **Application of the *Graham v. John Deere Co.* factual standards**

a. **Determining the scope and content of the prior art**

The Thoen et al. patent is directed to a detergent tablet comprising a compressed solid body portion having therein at least one mold in said compressed solid body portion. This disclosure is set forth more specifically in the Abstract, which reads as follows:

A detergent tablet comprising i) a compressed solid body portion having therein at least one mould in said compressed solid body portion; and ii) at least one non-compressed, non-encapsulating portion mounted in said at least one mould of said compressed solid body portion, having an area of B, said at least one non-compressed, non-encapsulating portion comprising at least one detergent active; wherein surface area of said detergent tablet, excluding area of said at least one mould, is A; and wherein further ratio of B to A is from about 1:50 to about 4:1, by area.

The non-compressed, non-encapsulating portion of the tablet is intended to contain components of the detergent tablet that are adversely affected by compression. This objective is disclosed in the Thoen et al. patent at column 6, lines 17-30, which reads as follows:

The non-compressed, non-encapsulating portion comprises at least one detergent active component, but may comprise a mixture of more than

one detergent active components. Detergent active components suitable for incorporation in the non-compressed, non-encapsulating portion include components that interact with one or more detergent active components present in the compressed portion. In particular, preferred components for the non-compressed, non-encapsulating portion are those that are adversely affected by compression pressure of for example a compression tablet press. Examples of such detergent active components include, but are not limited to, surfactant, bleaching agent, bleach activator, bleach catalyst, enzyme, corrosion inhibitor, perfume and an alkalinity source.

The Thoen et al. patent discloses at column 14, lines 4-8, that the non-compressed, non-encapsulating portion should be contained within the compressed portion of the tablet in order to avoid leakage. That disclosure reads as follows:

Additionally, it is preferred that when a 48-hour old tablet is inverted, at ambient conditions, for 10 minutes, more preferably 30 minutes, even more preferably 2 hours, the non-compressed, non-encapsulating portion does not drip or separate from the compressed solid body.

Accordingly, the non-compressed, non-encapsulating portion of the solid body should reside within the compressed portion of the tablet. Otherwise, there would be no barrier preventing the non-compressed, non-encapsulating portion from dripping or otherwise separating from the compressed solid body. Such a non-compressed, non-encapsulating portion would not be visible over any of the circumference of the tablet, let alone over the entire circumference.

As noted above, the Examiner's Action contains the following characterization of Thoen et al. as disclosing that the non-compressed, non-encapsulating portion is present in mold(s) formed by the compressed portion:

The examiner contends and respectfully disagrees because Thoen et al. specifically teach[es] that said detergent composition is in the form of a multilayered tablet (column 14). Thoen et al. specifically discloses that said tablet is prepared by having a compressed portion in a plurality of molds. The plurality of molds is filled with a non-compressed, non-encapsulating portion (col. 52, lines 47-54) using a modified tablet press comprising modified upper and lower punches. The upper and lower punches of the modified tablet press are modified such that the compressed portion provides one or more indentations, which form the molds to which the non-compressed portion is delivered (col. 51, lines 54-55). Therefore, it can be seen that Thoen et al. teaches that said multi-layered tablet is formed with at least three layers and said layers comprise compressed layers and a non-compressed [layer]. Accordingly, the claims are suggested by the prior art of record.

(Action at page 4, line 14, to page 5, line 2).

Applicants agree that Thoen et al. discloses at column 52, lines 47-54, as well as in the Abstract, that the non-compressed, non-encapsulating portion is mounted in one or more molds formed from the compressed portion. For the reasons set forth above, the non-compressed, non-encapsulating portion fills molds formed from the compressed portion of the tablet.

**b. Ascertaining the differences
between the prior art and the claims at issue**

Applicants' invention as claimed in claim 1 is to a detergent or cleaner shaped body in the form of a three-layer tablet. The three-layer tablet comprises a viscoelastic phase, said phase comprising, based on its weight, 60 to 85% by weight of one or more alkylbenzene sulfonates, having a storage modulus of between 40,000 and 800,000 Pa. The viscoelastic phase is present in the form of a layer placed between two tableted phase, each in the form of a layer so that the three

layers of the tablet are visible over the entire circumference of the tablet. Claims 2-25, which are dependent upon claim 1 or upon a claim that is dependent ultimately upon claim 1, incorporate the limitations of claim 1 and set forth further limitations in the claimed detergent or cleaner shaped body.

The Thoen et al. tablet comprises at least one non-compressed, non-encapsulating portion mounted in at least one mold of said compressed solid body portion. At least part of the outer edge of the circumference of the tablet, must consist entirely of the compressed portion forming a side wall of the mold(s).

For that reason, the composition and structure of the tablet disclosed in the Thoen et al. patent must be different than Applicants' claimed tablet. Applicants' claimed viscoelastic phase layer exists along the entire circumference of the tablet and is stable, *i.e.*, does not drip or co-react with moisture and air. The Thoen et al. patent discloses a non-compressed, non-encapsulating portion of the tablet that cannot be present along the entire circumference of the tablet.

Nor can one skilled in the art modify the Thoen et al. tablet to obtain Applicants' claimed tablet, which comprises three separate layers, each of said three layers of the tablet being visible over the entire circumference of the tablet. As set forth above, the Thoen et al. patent instructs one skilled in the art that the non-compressed, non-encapsulating layer is in molds formed from the compressed portion of the tablet. Thoen et al. discloses the importance that the non-compressed, non-encapsulating portion does not drip or separate from the compressed solid body, which would inevitably happen if the non-compressed, non-encapsulating portion formed part of the entire circumference of the tablet. Furthermore, as noted above, the non-compressed, non-encapsulating portion of the tablet appears to contain detergent active components (surfactant, bleaching agent, bleach activator, bleach catalyst, enzyme, corrosion inhibitor, perfume and alkalinity source) that are likely to be "water-sensitive ingredients or ingredients which can co-react when brought together in aqueous environment" (Column 50, lines 21-24). Hence, modifying, the Thoen et al. tablet to provide that the non-compressed, non-encapsulating portion is present and visible over the entire circumference of the tablet would inevitably expose the components comprising the non-compressed, non-encapsulating portion to dripping and contact with moisture, thus adversely

affecting those components. As Applicants' claimed viscoelastic layer is so exposed by reason of being visible over the entire circumference of the tablet, Applicants' layer must be different in composition from the non-compressed, non-encapsulating layer disclosed in the Thoen et al. patent.

c. Resolving level of ordinary skill in the pertinent art

The inventors of the present application and the inventors of the prior art patent would represent persons of ordinary skill in the art.

**4. Application of the KSR test demonstrates
the unobviousness of Applicants' claimed tablet**

The Supreme Court's analysis in *KSR* included a determination of obviousness based on the lack of improved results of a claimed combination over the elements in the combination. The Court cited *United States v. Adams*, 383 U.S. 39, 40 [148 USPQ 479] (1996) in determining that "The fact that the elements worked together in an unexpected and fruitful manner supported the conclusion that Adams's design was not obvious to those skilled in the art" (referring to *United States v. Adams*, 383 U.S. 39, 40 [148 USPQ 479] (1966) *Id.* 82 USPQ2d 1395). Applicants' claimed tablet comprises separate layers that work together in an unexpected and fruitful manner over the tablet disclosed in Thoen et al. in that it is easier to assemble in not requiring containing a non-compressed, non-encapsulating portion of a tablet in a mold.

**5. Applying the legal standard under 35 U.S.C. Section 103,
there exists no *prima facie* case of obviousness
of Applicants' claims over the Thoen et al. patent**

As set forth above, Applicants' claimed detergent or cleaner shaped body is in the form of a three-layer tablet comprising a viscoelastic phase present in the form of a layer placed between two tableted phases each in the form of a layer. The three layers of the tablet are visible over the entire circumference of the tablet. The Thoen et al. detergent tablet comprises a compressed solid body

portion with at least one non-compressed, non-encapsulating portion present within the compressed solid body portion and not forming part of the entire circumference of the tablet. Accordingly, for the reasons set forth hereabove, the rejection of claims 1-25 under 35 U.S.C. Section 103(a) as being unpatentable over United States Patent No. 6,548,473 to Thoen et al., is untenable and should be withdrawn.

IV. Conclusion

It is believed that the above Amendment and Remarks constitute a complete response under 37 CFR § 1.111 and that all bases of rejection in the Examiner's Action have been adequately rebutted or overcome. A Notice of Allowance in the next Office Action is, therefore, respectfully requested. The Examiner is requested to telephone the undersigned attorney if any matter that can be expected to be resolved in a telephone interview is believed to impede the allowance of pending claims 1-25 of United States Patent Application Serial No. 10/694,549.

Respectfully submitted,

PAUL AND PAUL

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/John S. Child, Jr./
John S. Child, Jr.
Registration No. 28833
Suite 2900
2000 Market Street
Philadelphia, PA 19103-3229
Telephone: (215) 568-4900
Facsimile: (215) 567-5057
Attorneys for Applicants

CORRESPONDENCE ADDRESS

Customer No. 55495
Paul and Paul
Suite 2900
2000 Market Street
Philadelphia, PA 19103-3229
Paul and Paul Order No. 6124